

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/656,199	09/08/2003	Kazuhisa Nakata	60188-646	7483
7590 02/24/2005			EXAMINER	
Jack Q. Lever, Jr. McDERMOTT, WILL & EMERY 600 Thirteenth Street, N.W.			CAO, PHAT X	
			ART UNIT	PAPER NUMBER
Washington, DC 20005-3096			2814	
			DATE MAILED: 02/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Exa	SET TO EXPIRE 3 M	ONTH(S) FROM
The MAILING DATE of this communication appears Period for Reply	at X. Cao on the cover sheet with SET TO EXPIRE 3 M In no event, however, may a r	2814 ith the correspondence address ONTH(S) FROM
The MAILING DATE of this communication appears Period for Reply	on the cover sheet will be the	ith the correspondence address ONTH(S) FROM
reliou for Reply	SET TO EXPIRE 3 M	ONTH(S) FROM
A SHORTENED STATUTORY PERIOD FOR REPLY IS S	In no event, however, may a r	
THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). I after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within If NO period for reply is specified above, the maximum statutory period will apply Failure to reply within the set or extended period for reply will, by statute, cause Any reply received by the Office later than three months after the mailing date of earned patent term adjustment. See 37 CFR 1.704(b).	y and will expire SIX (6) MON	ry (30) days will be considered timely. THS from the mailing date of this communication.
Status		
1)⊠ Responsive to communication(s) filed on <u>12 Novem</u>	ber 2004.	
2a) ☐ This action is FINAL . 2b) ☒ This actio		
3) Since this application is in condition for allowance ex		ers, prosecution as to the merits is
closed in accordance with the practice under Ex par	te Quayle, 1935 C.D	. 11, 453 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.		•
4a) Of the above claim(s) <u>3-5 and 9-11</u> is/are withdra	awn from consideration	nn
5) Claim(s) is/are allowed.		JII.
6) Claim(s) 1 is/are rejected.		
7)⊠ Claim(s) <u>2 and 6-8</u> is/are objected to.		•
8) Claim(s) are subject to restriction and/or elect	tion requirement.	•
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) accepted	or b) objected to b	ov the Evaminer
Applicant may not request that any objection to the drawing	g(s) be held in abeyand	Ce See 37 CED 1 25/5\
Replacement drawing sheet(s) including the correction is r		
11)☐ The oath or declaration is objected to by the Examine	er. Note the attached	Office Action or form PTO-152
Priority under 35 U.S.C. § 119	-	
12)⊠ Acknowledgment is made of a claim for foreign priorit	y under 3E LLC C. S.	110(a) (d) an (0
a)⊠ All b)□ Some * c)□ None of:	y under 35 U.S.C. §	119(a)-(a) or (ī).
1.⊠ Certified copies of the priority documents have	heen received	
2. Certified copies of the priority documents have		polication No
3. Copies of the certified copies of the priority doc	cuments have been r	received in this National Stace
application from the International Bureau (PCT	Rule 17 2(a))	Cocived in this Ivational Staye
* See the attached detailed Office action for a list of the		eceived.
	2 22 20 1100 1100 1100 1100 1100 1100 1	
attachment(s)		
) Notice of References Cited (PTO-892) Discription Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Su	mmary (PTO-413)
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Info	/Mail Date ormal Patent Application (PTO-152)
Paper No(s)/Mail Date	6)	
Patent and Trademark Office OL-326 (Rev. 1-04) Office Action Sur	mmany	Part of Paper No /Mail Date 0205

Page 2

Art Unit: 2814

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group III (claims 1,2, 6, 7, and 8) in the reply filed on 11/12/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

- 3. Claims 6-7 are objected to because of the following informalities:
- in claim 6, lines 6-7, "wherein gates of nMISFETs of the first type are arranged in the second discontinuous active region" should be changed to "wherein **the gate of an nMISFET** of the first type **is** arranged in the second discontinuous active region".
- in claim 6, lines 7-9, "whereas a gate of an nMISFET of the second type, which needs higher current driving capability than the nMISFETs of the first type, is placed in the second continuous active region" should be changed to "whereas gates of nMISFETs of the second type, which need higher current driving capability than the nMISFET of the first type, are placed in the second continuous active region".
- in claim 7, lines 7-8, "wherein gates of nMISFETs of a first type are arranged in the discontinuous active region" should be changed to "wherein **the gate of an nMISFET** of a first type **is** arranged in the discontinuous active region".

Application/Control Number: 10/656,199

Art Unit: 2814

- in claim 7, lines 8-10, "whereas a gate of an nMISFET of a second type, which needs higher current driving capability than the nMISFETs of the first type, is placed in the continuous active region" should be changed to "whereas gates of nMISFETs of a second type, which need higher current driving capability than the nMISFET of the first type, are placed in the continuous active region".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Inaba et al (US. 6,448,618).

Inaba (Fig. 1) discloses a semiconductor device comprising: a first discontinuous

Application/Control Number: 10/656,199

Art Unit: 2814

active region 11b in which only a gate of a pMISFET is placed (column 7, lines 52-54); a first continuous active region 11a in which gates of three or more respective pMISFETs are arranged (column 7, lines 52-54); and a trench isolation 12 surrounding the first discontinuous active region 11b and the first continuous active region 11a, wherein gates of pMISFETs of a first type are arranged in the first continuous active region 11a, whereas a gate of a pMISFET of a second type, which needs higher current driving capability than the pMISFETs of the first type, is placed in the first discontinuous active region 11b (column 7, lines 43-47).

Allowable Subject Matter

- 6. Claims 2 and 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- the prior art of record fails to disclose the structure and characteristics of the two respective MISFETs disposed in the two-input active region as claimed in claims 2 and 8.
- The prior art of record fails to disclose the gates of nMISFETs placed in the continuous active region having higher current driving capability than the gate of an nMISFET disposed in the discontinuous active region as claimed in claims 6 and 7.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phat X. Cao whose telephone number is (571) 272-1703. The examiner can normally be reached on Monday Thursday.

Application/Control Number: 10/656,199

Art Unit: 2814

Page 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PC February 18, 2005

PHAT X. CAO
PRIMARY EXAMINER